

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. Claims 3, 15, 16, and 25-29 are amended to correct minor informalities. Applicant respectfully submits that no new matter has been added by way of the amendments. Claims 6, 22, 33, and 34 were canceled in a previous amendment. After amending the claims as set forth above, Claims 1-5, 7-21, 23-32, 35, and 36 are now pending in this application.

I. Claim Rejections Under 35 U.S.C. § 102(e)

In section 2 of the Office Action, Claims 1-5, 8-11, 13-15, 19-21, 23-25, 27-29, 31, 32, 35, and 36 were rejected under 35 U.S.C. § 102(e) as being anticipated by United States Patent No. 6,744,740 to Chen (Chen). Applicant respectfully submits that Chen fails to teach, suggest, or describe all of the elements of at least independent Claims 1, 21, and 31.

Claim 1, with emphasis added through underlining and bolding, recites in part:

generating a first time stamp and a second time stamp at the first intermediate node, wherein the first time stamp corresponds to receipt of the first message at the first intermediate node and the second time stamp corresponds to transmission of the first message from the first intermediate node to the second intermediate node;

generating a third time stamp and a fourth time stamp at the second intermediate node, wherein the third time stamp corresponds to receipt of the first message at the second intermediate node and the fourth time stamp corresponds to transmission of the first message by the second intermediate node;

calculating a propagation delay between the first intermediate node and the second intermediate node, wherein the
propagation delay comprises a difference between the second time stamp and the third time stamp; and

Claim 21, with emphasis added through underlining and bolding, recites in part:

a first intermediate node along the first path, wherein the first intermediate node is configured to generate a first time stamp

corresponding to receipt of the first message at the first intermediate node and a second time stamp corresponding to transmission of the first message from the first intermediate node to a second intermediate node along the first path;

the second intermediate node configured to generate a third time stamp corresponding to receipt of the first message at the second intermediate node; and

selecting means configured to select the first path from said plurality of paths for communication between said source node and said destination node based at least in part on a propagation delay between the first intermediate node and the second intermediate node, wherein **the propagation delay comprises a difference between the second time stamp and the third time stamp**

Claim 31, with emphasis added through underlining and bolding, recites in part:

means for identifying a first time that said message is received at the first intermediate node;

means for identifying a second time that said message is transmitted from the first intermediate node to the second intermediate node;

means for identifying a third time that the message is received at the second intermediate node, wherein the first time, the second time, and the third time are stored in a metrics field of the message;

means for determining a propagation delay between the first intermediate node and the second intermediate node, wherein **the propagation delay comprises a difference between the second time and the third time**; and

As Applicant has repeatedly argued in previous responses, Chen fails to teach, suggest, or describe calculating or determining a “propagation delay” as recited in Claims 1, 21, and 31.

On page 3 of the Office Action, the Examiner states:

Although the specification of the instant Application does not explicit stated the claimed limitation (a first time stamp, a second time stamp, and etc..) but such method of discovery

and/or request message, wherein recording the time of transmission and reception of the message at every node and calculate the total journey time for an acknowledge message to propagate from/to a source node and a destination node [0041, 0046, 0048, 0050, 0052, 0058]. However, such method of time stamping is widely known in the art. Chen disclosed such method of discovery and recording the message's time stamp at each and every node and selected a path that has the shortest calculated travel time).

Applicant respectfully disagrees. If Chen fails to describe the first timestamp, second timestamp, etc., Chen clearly fails to teach the elements of Claims 1, 21, and 31. Applicant respectfully submits that the Examiner is ignoring the claim elements which specifically define two distinct time stamps generated at each node such that “the propagation delay comprises a difference between the second time and the third time” as recited in Claims 1, 21, and 31.

Two times are needed at each node to remove the processing delay that occurs at each node between receipt of a message from a previous node and forwarding of the message to a next node. The message is not propagating during the processing delay. Therefore, any propagation delay that includes the processing delay at each node is inaccurate. To improve the accuracy of the propagation delay calculation, a receipt time at a node and a transmission time from a node are **both** generated. The receipt time is used to calculate the propagation delay between the previous node and the current node. The transmission time is used to calculate the propagation delay between the current node and the next node. If both the receipt time and the transmission time are not generated at each node, the propagation delay calculated necessarily includes the processing delay at each node during which the message is not actually propagating. Inclusion of the processing delays at each node in a propagation delay calculation causes errors in any distance calculated because the distance will necessarily be greater than the actual distance because the processing delay is nonzero.

Chen indicates a single “Time Stamp” column in Table 2. (Col. 7, line 56-col. 8, line 13). Chen further shows a single “Time Stamp” entry in Fig. 9. Chen further does not define whether the time stamp is generated at receipt of a message or transmission of a message. Such a delineation is unnecessary in the system described by Chen because Chen does not

teach calculation of a propagation delay at all. Chen teaches that an optimum path may be selected based on a “shortest time” which includes the processing delay at each node. (*See* col. 10, lines 47-49). Therefore, Chen fails to teach, suggest, or describe all of the elements of at least independent Claims 1, 21, and 31.

Applicant also respectfully disagrees that “such method of time stamping is widely known in the art” as stated by the Examiner. According to MPEP § 2144.03(A):

Official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known.

...

It is never appropriate to rely solely on “common knowledge” in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based.

Applicant respectfully submits that the elements asserted are not well-known and capable of instant and unquestionable demonstration as being well known as required under MPEP § 2144.03(A). Applicants respectfully request that the Examiner provide support for such an assertion.

An anticipation rejection cannot properly be maintained where the reference used in the rejection does not disclose all of the recited claim elements. As a result, Applicant respectfully requests withdrawal of the rejection of Claims 1, 21, and 31. Claims 2-5, 8-11, 13-15, 19-20, 23-25, 27-29, 32, 35, and 36 depend from one of Claims 1, 21, and 31. Therefore, Applicant respectfully requests withdrawal of the rejection of Claims 1-5, 8-11, 13-15, 19-21, 23-25, 27-29, 31, 32, 35, and 36.

II. Rejection of Claim 7 Under 35 U.S.C. § 103(a)

In section 4 of the Office Action, Claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Chen. Applicant respectfully disagrees. As an initial matter, Claim 7 depends from Claim 1, and should be allowable for at least the reasons discussed in section I. above. Additionally, on page 5 of the Office Action, the Examiner specifically states:

As per claim 7, as stated above in claim 1, Chen disclose the method of selecting a path that has the shortest total travel time but not explicitly the message's processing delay at a node. However, it would have obvious to one of ordinary skill in the art to provide such method of calculating the propagation delay (message's travel time from one node to the other node) and processing time to Chen in order to select a path that has the shortest total travel time to/from a source node and destination node.

Applicant respectfully disagrees. Chen mentions use of a shortest time without any further delineation. (*See* col. 10, lines 47-49). Chen does not distinguish between a propagation delay, a processing delay, or a travel time. Calculation of a shortest time to/from a source node and destination node does not require a calculation of a propagation delay or a processing delay. Chen, in fact, fails to contemplate either component of a shortest time determination because they are unnecessary to, and unnecessarily complicate, calculation of a shortest time between nodes. Therefore, there is no motivation whatsoever for Chen to calculate “a processing delay of the first intermediate node, wherein the processing delay comprises a difference between the first time stamp and the second time stamp, and further wherein the first path is selected based at least in part on the processing delay” as recited in Claim 7.

Therefore, Applicant respectfully submits that Chen fails to teach, suggest, or describe or to render obvious the elements as recited in Claim 7. As a result, Applicant respectfully requests withdrawal of the rejection of Claim 7.

III. Rejection of Claims 12, 16, and 26 Under 35 U.S.C. § 103(a)

In section 5 of the Office Action, Claims 12, 16, and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chen in view of United States Patent No. 6,115,580 to Chuprun *et al.* (Chuprun). Applicant respectfully disagrees. Chen and Chuprun, alone and in combination, fail to teach, suggest, or disclose all of the elements of at least independent Claims 1 and 21 from which Claims 12, 16, and 26 depend.

As discussed in Section I. above, Chen fails to teach, suggest, or describe all of the elements of at least independent Claims 1 and 21. Chuprun discloses a “system [which] uses

... terrain information and knowledge of network node locations to estimate the quality of node-to-node links in the network (e.g., by estimating path-loss between nodes). The link quality information is then used to determine an optimal connection path between two nodes.” (Col. 2, lines 6-11, with emphasis added through underlining). Chuprun, however, fails to teach, suggest, or describe calculating or determining a “propagation delay” as recited in Claims 1 and 21.

Therefore, Applicant respectfully submits that Chen and Chuprun fail to teach, suggest, or describe all of the elements as recited in Claims 1 and 21. As a result, Applicant respectfully requests withdrawal of the rejection of Claims 12, 16, and 26, which depend from one of Claims 1 and 21.

IV. Rejection of Claims 17, 18, and 30 Under 35 U.S.C. § 103(a)

In section 6 of the Office Action, Claims 17, 18, and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chen in view of United States Patent No. 4,873,517 to Baratz *et al.* (Baratz). Applicant respectfully disagrees. Chen and Baratz, alone and in combination, fail to teach, suggest, or disclose all of the elements of at least independent Claims 1 and 21 from which Claims 17, 18, and 30 depend.

As discussed in Section I. above, Chen fails to teach, suggest, or describe all of the elements of at least independent Claims 1 and 21. Baratz states:

When computing a least weight path from an origin node to a destination node in a data communication network, a route-computing network node uses information provided by the origin and destination nodes to compute least weight routes from those nodes to adjacent network nodes. The route-computing network node uses information in the topology database to compute least weight routes from network nodes adjacent the origin node to network nodes adjacent the destination node.

(Abstract). Baratz, however, fails to teach, suggest, or describe calculating or determining a “propagation delay” as recited in Claims 1 and 21.

Therefore, Applicant respectfully submits that Chen and Baratz fail to teach, suggest, or describe all of the elements as recited in Claims 1 and 21. As a result, Applicant respectfully requests withdrawal of the rejection of Claims 17, 18, and 30, which depend from one of Claims 1 and 21.

Applicant believes that the present application is in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

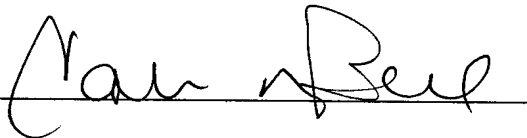
The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by the credit card payment instructions in EFS-Web being incorrect or absent, resulting in a rejected or incorrect credit card transaction, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date June 6, 2008

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